

On the Use of Linearized Langmuir Equations

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On page 1799 the calculation of the covariance matrix given by Eq. [8] is only valid when using unweighted least squares regression or when using relative weighting. When weighting the residuals by the inverse of the variance in the data, the covariance matrix should be calculated as:

$$Cov = A^{-1} \quad [8]$$

Also, when weighting by the inverse of the variance in the data the 95% confidence intervals for the fitted parameter values should be calculated using 1.96 in place of the t-distribution given in Eqs. [10] and [11]. The online spreadsheet has been updated accordingly.

Additionally, in Table 1 the commonly used name for Linearization I should read the Langmuir linearization. The Hanes-Woolf linearization refers to the analogous linearization of the Michaelis-Menten equation used in enzyme reaction studies.